

**WE CLAIM AS OUR INVENTION:**

1. A local coil for magnetic resonance applications, comprising:  
an annular base body having an inherent stability causing said base body to assume an inherent form in an absence of deforming forces acting on said base body;  
an antenna resonator embedded in said base body and adapted to receive a magnetic resonance signal; and  
said base body having a flexibility allowing said base body to be inserted via a nostril into the nasal cavity of a subject in whom said magnetic resonance signal is generated, and allowing said base body to be removed from the nasal cavity via the nostril, said base body, in the nasal cavity substantially assuming said inherent form.
2. A local coil as claimed in claim 1 wherein said base body also is adapted to assume said inherent form when placed in the palate of the subject.
3. A local coil as claimed in claim 1 comprising an elastic supplementary body connected to said base body.
4. A local coil as claimed in claim 3 wherein said supplementary body has an interior cavity and a connection allowing said interior cavity of said supplementary body to be filled with a fluid.
5. A local coil as claimed in claim 3 wherein said supplementary body is connected adjacent to a side of said base body.
6. A local coil as claimed in claim 1 comprising a pre-intensifier connected following said antenna resonator in a propagation direction of said magnetic resonance signal.

7. A local coil as claimed in claim 6 wherein said pre-intensifier is integrated into said base body.

8. A local coil as claimed in claim 6 comprising a cable connecting said pre-intensifier with said base body.

9. A local coil as claimed in claim 8 wherein said cable has a length in a range between 8 cm and 20 cm.